

## Abstract

An image analysis process is for in vivo small animal imaging, and an apparatus is for image evaluation for the in vivo small animal imaging, for automatic evaluation of two-dimensional and/or three-dimensional images. One-dimensional, two-dimensional or three-dimensional image data are read and the image data are segmented on the basis of image data characteristics, into segments. The image data characteristics represent areas of interest for the small animal. Cohesive areas are formed, carried out by association of the segments on the basis of association criteria. After the filtering of the cohesive areas and analysis on the basis of analysis criteria, changes in the areas of interest for the small animal can be detected automatically and quickly on the basis of an experimental databank, without any manual action or medical estimation being necessary.